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Applicant: William R. Kissel

Serial No.: 10/828,756 Group Art Unit: 3682

REMARKS

No new matter is added by this amendment. The present application was filed on

April 21, 2004 with original claims 1-40. By this amendment claims 4 and 22 have been

amended. The claims remaining in consideration are claims 1-40. Reconsideration is

respectfully requested.

The Examiner indicated that claims 3-19 and 22-38 contain allowable subject

matter. This is noted with appreciation.

Claims 1, 2, 20 and 21 were rejected under 35 U.S.C. § 102(b) as being

anticipated by U.S. Patent 6,308,134 issued October 23, 2001 to Steven R. Croyle et al.

This rejection is respectfully traversed.

Claims 1 and 20 are independent claims. The present invention as set forth in

independent claim I sets forth a method for establishing an acceleration of a vehicle. The

method includes the steps of establishing a gravity vector representing acceleration due to

gravity, measuring acceleration of the vehicle in the first direction and establishing a first

acceleration value, and measuring acceleration of the vehicle in the second direction and

establishing a second acceleration value. The method also includes the step of

establishing a magnitude of a horizontal component of acceleration of the vehicle as a

function of the gravity vector and the first and second acceleration values.

Croyle discloses a vehicle navigation system which combines GPS with

information received from a multiple axis accelerometer. The Croyle navigation system

uses the accelerometer information to improve or update the position of a vehicle. The

accelerometer sensor 28 provides acceleration information in at least two orthogonal axis,

i.e., a lateral axis and a vertical axis with respect to the vehicle. The vertical and/or

lateral acceleration information is used to update the position of the vehicle. However, it

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should be noted that the vertical acceleration information is respect to the sensor or the

vehicle, and is not related to gravity and does not relate to or reflect a gravity vector.

Thus Applicants respectfully assert that the Croyle system does not establish a gravity

vector "representing acceleration due to gravity", as required by independent claim 1.

Furthermore Croylc does not establish a magnitude of a horizontal component of the

acceleration of the vehicle as a function of the gravity vector and the first and second

acceleration values. At best, the Croyle system establishes a lateral acceleration and/or a

vertical acceleration of the vehicle which are unrelated to a gravity vector.

Independent claim 20 sets forth a system for establishing acceleration of the

vehicle. The system includes an accelerometer device and a controller. The

accelerometer device measures acceleration of the vehicle in a first direction and

establishes a first acceleration value and measures acceleration of a vehicle in a second

direction and establishes a second acceleration value. The controller establishes a gravity

vector which represents acceleration due to gravity and establishes a magnitude of a

horizontal component of the acceleration of the vehicle as a function of the gravity vector

and the first and second acceleration values. As discussed above, the Croyle system does

not establish a gravity vector representing acceleration due to gravity nor does it establish

a magnitude of a horizontal component of the acceleration as a function of the gravity

vector and the first and second acceleration values.

Since the Croyle system does not include at least one limitation of independent

claims 1 or 20, Applicant respectfully asserts that the 102(b) rejection of claims 1 and 20

is not proper and must be withdrawn.

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Claims 2 and 21 are dependent upon independent allowable claims 1 and 20, respectively. Therefore for the reasons set forth above, and based on their own merits, Applicants respectfully assert that claims 2 and 21 are also allowable.

Independent claims 39 and 40 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants "admitted art" in view of Croyle et al. Independent claim 39 sets forth a method for controlling a brake mechanism of a towed vehicle. The method includes the steps of establishing a gravity vector representing acceleration due to gravity and establishing the magnitude of a horizontal component of the acceleration of the towing vehicle as a function of the gravity vector and first and second acceleration values. As discussed above, the Croyle system does not establish a gravity vector representing acceleration due to gravity. Independent claim 40 sets forth a system for controlling a brake mechanism of a towed vehicle towed by a towing vehicle. The system includes a controller for establishing a gravity vector and establishing the magnitude of a horizontal component of the acceleration of the towing vehicle as a function of the gravity vector and first and second acceleration values. Neither Croyle nor Applicant's admitted prior art perform these functions. Therefore Applicants respectfully assert that independent claims 39 and 40 are allowable over the cited prior art.

Accordingly, it is respectfully submitted that the application, as amended, is now presented in condition for allowance, which allowance is respectfully solicited. Applicant believes that no fees are due, however, if any become required, the Commissioner is hereby authorized to charge any additional fees or credit any overpayments to Deposit Account 08-2789 in the name of Howard & Howard Attorneys, P.C.

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If the Examiner believes that a telephone interview would be helpful, please contact the undersigned at the number below.

Respectfully submitted

HOWARD & HOWARD ATTORNEYS, P.C.

<u>September 12, 2005</u>

Date

James R. Yee, Registration No. 34,460 The Pinehurst Office Center, Suite #101

39400 Woodward Avenue

Bloomfield Hills, Michigan 48304

(248) 723-0349